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January 28, 2002

**BY ELECTRONIC FILING**

Ms. Magalie R. Salas  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

**Re: Oral Ex Parte Presentation  
ET Docket No. 98-153**

Dear Ms. Salas:

This is to report that on January 25, 2002, representatives of QUALCOMM, AT&T Wireless, Cingular Wireless, and Sprint PCS (collectively referred to as the "Wireless Companies") met with Commissioner Kevin Martin and Monica Desai, Legal Advisor to Commissioner Martin, to discuss the above-referenced proceeding, and specifically QUALCOMM's recent study demonstrating that QUALCOMM's E911 technology (so-called gpsOne) cannot meet the FCC's E911 mandate in the face of harmful interference from ultra wideband ("UWB") devices. Attending the meeting were Jonas Neihardt, Kevin Kelley, and myself on behalf of QUALCOMM; David Wye on behalf of AT&T Wireless; Jim Bugel on behalf of Cingular Wireless; and, Luisa Lancetti on behalf of Sprint PCS. Bob Calaff also observed the meeting on behalf of VoiceStream Wireless.

During the meeting, the Wireless Companies expressed their concern that QUALCOMM's recent testing had demonstrated that a wireless phone containing the gpsOne technology will suffer substantial degradation from emissions from a UWB device in its vicinity such that the phone's ability to deliver the location of a caller to 911 is jeopardized. They emphasized that QUALCOMM's testing was conducted in a very benign indoor environment and with a relatively strong GPS signal. The QUALCOMM representatives at the meeting pointed out that Figure 3-6 in QUALCOMM's report shows that the GPS signal used in QUALCOMM's testing is stronger than the GPS signal which is actually received 95% of the time. This stronger signal was used for the testing to isolate the impact of UWB emissions, to eliminate other variables, and to generate reproducible results.

At the meeting, the QUALCOMM representatives explained that at the weaker signal levels set forth in the TIA draft standard, which, when approved, will be the worldwide standard for the performance of wireless phones containing position location technology and using the code division multiple access ("CDMA") air interface, the degradation suffered by the gpsOne receiver as a result of UWB emissions would be much more severe. Thus, at realistic scenarios, E911 service could be substantially jeopardized by UWB emissions, and the Wireless Companies urged that as a matter of Commission policy, the Commission should not permit such degradation to a safety of life service such as E911.

In interpreting QUALCOMM's test results and designing an emissions mask, the QUALCOMM representatives urged the Commission to pay particular attention to the overall degradation in performance between the gpsOne receiver operating in the face of UWB emissions as opposed to the reference receiver, rather than merely looking at the point in time at which the wireless phone was unable to meet the required level of accuracy 50% of the time. Such degradation equates to a substantially eroded E911 service.

Moreover, the QUALCOMM representatives explained during the meeting that QUALCOMM has performed numerous other tests to characterize the performance of gpsOne technology indoors and in other challenging environments in which Part 15 devices, such as personal computers, were present. However, QUALCOMM never experienced results approaching those reached in the recent tests of the performance of gpsOne in the face of UWB emissions.

Consequently, QUALCOMM reiterated that to mitigate the interference from a single UWB device, UWB devices should be limited to above 6 GHz; UWB out-of-band emissions should be limited across all bands below 6 GHz to 35 dB below current Part 15 levels, which would protect gpsOne and wireless receivers to within six feet from such harmful interference; and, there should be an additional margin to account for aggregate interference.

The Wireless Companies also explained that the major UWB proponents have declined to loan or sell QUALCOMM a UWB device for testing purposes, and once again urged that there should be collaborative testing of the harmful interference from actual UWB devices before the Commission sets the technical parameters for UWB devices. As it stands now, there is no test in the record to verify that such parameters will prevent harmful interference to wireless phone calls, both in general and particularly with regard to E911 service.

In addition, the Wireless Companies reiterated that tens of millions of Americans rely on the existing wireless voice and data services, and it would be unwise for the Commission to take any action to jeopardize these services, as well as the significant investments made by the Wireless Companies to provide these services. For example, the QUALCOMM representatives pointed out that QUALCOMM had spent well over \$1 billion to develop the gpsOne technology, and Ms. Lancetti of Sprint PCS noted that Sprint PCS had paid over \$3 billion just to acquire its spectrum. The equities in this proceeding weigh heavily in favor of the Wireless Companies.

Finally, the Wireless Companies discussed their concern about the difficulty and expense of attempting to ameliorate harmful interference from UWB devices. It will be extremely difficult, if not impossible, to mitigate such harmful interference, and to place the burden of doing so on the wireless carriers would be fundamentally inconsistent with Part 15 and grossly unfair.

Sincerely yours,

Dean R. Brenner  
Attorney for QUALCOMM Incorporated

cc: Commissioner Kevin Martin  
Monica Desai